What is claimed is:

1. A method for sharpening one or more bands of sensor data, the method comprising:
    receiving blue, green, red, near-infrared, and panchromatic bands of data;
    correcting data of the panchromatic band based on the blue, green, red, and near-
5   infrared bands of data; and
    sharpening the data of one or more of the green, red, and near-infrared bands
        based on the corrected data of the panchromatic band.

2. The method of Claim 1, further comprising combining the sharpened data of the green, red, and near-infrared bands with the received panchromatic band of data.

10   3. The method of Claim 2, further comprising generating an image based on the combined data and displaying the generated image.

4. The method of Claim 1, wherein correcting includes:
    converting the received blue, green, red, near-infrared, and panchromatic bands of
        data to power-format;
15   sharpening the converted power-formatted data of the green, red, and near-
        infrared bands based on the received panchromatic band of data; and
    correcting the power-formatted data of the panchromatic band based on the
        sharpened power values for the data of the green, red, and near-infrared bands.

5. The method of Claim 4, wherein correcting the power-formatted data is further
20 based on width and gap information of the blue, green, red, and near-infrared bands.

6. The method of Claim 4, wherein correcting data of the panchromatic band further includes resizing the data of the blue, green, red, and near-infrared bands to match resolution of the data of the panchromatic band prior to converting the received blue, green, red, near-infrared, and panchromatic bands of data to the power-format.

25   7. The method of Claim 4, wherein converting includes converting the data of the blue, green, red, and near-infrared bands into radiance values and converting the radiance values to the power-format.

8. The method of Claim 7, wherein converting the radiance values to the power-format is based on upper and lower width limits of the blue, green, red, and near-infrared
30 bands.

9. The method of Claim 1, further comprising subtracting power of the corrected pan band from power of the original pan band to form a band of data.

10. The method of Claim 1, wherein the blue, green, red, near-infrared, and panchromatic bands of data are generated by one of an aircraft or satellite sensing system.

11. A computer program product residing on a computer-readable medium for sharpening one or more bands of sensor data in the visual spectrum, the computer program product comprising:

first computer program code means for receiving blue, green, red, near-infrared, and panchromatic bands of data;

second computer program code means for correcting data of the panchromatic band based on the blue, green, red, and near-infrared bands of data; and

third computer program code means for sharpening the data of one or more of the green, red, and near-infrared bands based on the corrected data of the panchromatic band.

12. The computer program product of Claim 11, further comprising fourth computer program code means for combining the sharpened data of the green, red, and near-infrared bands with the received panchromatic band of data.

13. The computer program product of Claim 12, further comprising fifth computer program code means for generating an image based on the combined data and a means for displaying the generated image.

14. The computer program product of Claim 11, wherein the second computer program code means includes:

sixth computer program code means for converting the received blue, green, red, near-infrared, and panchromatic bands of data to power-format;

seventh computer program code means for sharpening the converted power-formatted data of the green, red, and near-infrared bands based on the received panchromatic band of data; and

eighth computer program code means for correcting the power-formatted data of the panchromatic band based on the sharpened power values for the data of the green, red, and near-infrared bands.

15. The computer program product of Claim 14, wherein the eighth computer program code means corrects the power-formatted data further based on width and gap information of the blue, green, red, and near-infrared bands.

16. The computer program product of Claim 14, wherein the second computer program code means further includes ninth computer program code means for resizing the data of the blue, green, red, and near-infrared bands to match resolution of the data of the panchromatic band prior the received blue, green, red, near-infrared, and panchromatic bands of data to converting to the power-format.

17. The computer program product of Claim 14, wherein the sixth computer program code means includes ninth computer program code means for converting the data of the blue, green, red, near-infrared, and panchromatic bands into radiance values and tenth computer program code means for converting the radiance values to the power-format.

18. The computer program product of Claim 17, wherein the sixth computer program code means converts the radiance values to the power-format based on upper and lower width limits of the bands.

19. The computer program product of Claim 11, further comprising fourth computer program code means for subtracting power of the corrected pan band from power of the original pan band to form a band of data.

20. The computer program product of Claim 11, wherein the blue, green, red, near-infrared, and panchromatic bands of data are generated by one of an aircraft or satellite sensing system.

21. A system for sharpening one or more bands of sensor data, the system comprising:
    a processor coupled to the input interface, the processor including:
        a first component configured to receive blue, green, red, near-infrared, and panchromatic bands of data;
        a second component configured to correct data of the panchromatic band based on the blue, green, red, and near-infrared bands of data;
        a third component configured to sharpen the data of one or more of the green, red, and near-infrared bands based on the corrected data of the panchromatic band; and

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a fourth component configured to combine the sharpened data of the green, red, and near-infrared bands with the received panchromatic band of data; and

a display device coupled to the processor configured to display an image based on the combined data.

22. The system of Claim 21, wherein the second component includes:

a fifth component configured to convert the received blue, green, red, near-infrared, and panchromatic bands of data to power-format;

a sixth component configured to sharpen the converted power-formatted data of the green, red, and near-infrared bands based on the received panchromatic band of data; and

a seventh component configured to correct the power-formatted data of the panchromatic band based on the sharpened power values for the data of the green, red, and near-infrared bands.

23. The system of Claim 22, wherein the seventh component corrects the power-formatted data further based on width and gap information of the blue, green, red, and near-infrared bands.

24. The system of Claim 22, wherein the second component further includes an eighth component configured to resize the data of the blue, green, red, and near-infrared bands to match resolution of the data of the panchromatic band prior to converting the received blue, green, red, near-infrared, and panchromatic bands of data to the power-format.

25. The system of Claim 22, wherein the fifth component includes an eighth component configured to convert the data of blue, green, red, and near-infrared bands into radiance values and a ninth component configured to convert the radiance values to the power-format.

26. The system of Claim 25, wherein the ninth component converts the radiance values to the power-format based on upper and lower width limits of the respective band.

27. The system of Claim 21, wherein the processor includes a fifth component configured to subtract the corrected pan band power from original pan band power to form a band.

28. The system of Claim 21, wherein the blue, green, red, near-infrared, and panchromatic bands of data are generated by one of an aircraft or satellite sensing system.

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29. A method for sharpening one or more bands of sensor data, the method comprising:

    receiving a plurality of first bands of data at a first resolution level, and a second band of data at a second resolution level, wherein the plurality of bands of data are included within the second band and the first resolution level is less than the second resolution level;

    correcting data of the second band based on the plurality of first bands of data; and

    sharpening the data of one or more of the plurality of first bands based on the corrected data of the second band.

30. The method of Claim 29, wherein correcting includes:

    determining power values for gaps between each of the plurality of first bands of data;

    determining a total power value for the second band of data; and

    removing the determined power values for gaps between each of the plurality of first bands of data from the determined total power value for the second band of data.

31. A computer program product residing on a computer-readable medium for sharpening one or more bands of sensor data in the visual spectrum, the computer program product comprising:

    first computer program code means configured to receive a plurality of first bands of data at a first resolution level, and a second band of data at a second resolution level, wherein the plurality of bands of data are included within the second band and the first resolution level is less than the second resolution level;

    second computer program code means configured to correct data of the second band based on the plurality of first bands of data; and

    third computer program code means configured to sharpen the data of one or more of the plurality of first bands based on the corrected data of the second band.

32. The computer program product of Claim 31, wherein the second computer program code means includes:

    four computer program code means configured to determine power values for gaps between each of the plurality of first bands of data;

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fifth computer program code means configured to determine a total power value for the second band of data; and

sixth computer program code means configured to remove the determined power values for gaps between each of the plurality of first bands of data from the determined a total power value for the second band of data.

33. A system for sharpening one or more bands of sensor data, the system comprising:

a processor coupled to the input interface, the processor including:

a first component configured to receive a plurality of first bands of data at a first resolution level, and a second band of data at a second resolution level, wherein the plurality of bands of data are included within the second band and the first resolution level is less than the second resolution level;

a second component configured to correct data of the second band based on the plurality of first bands of data;

a third component configured to sharpen the data of one or more of the plurality of first bands based on the corrected data of the second band; and

a fourth component configured to combine the sharpened data with the second band of data.

a display device coupled to the processor configured to display an image based on the combined data.

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